

PATENT

NC 84,049

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A process for synthesizing the compound 1,5-Dinosyl-3,3,7,7-tetrakis(difluoramino) octahydro-1,5-diazocine (DNTDFD), comprising ~~the following steps:~~

reacting tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF2/oleum, in the presence of a diluent and absorbent for the reagent difluoramine, initially approximately between -5 and 0 degrees C; and

allowing ~~the~~ a temperature to rise to between 10 degrees C and ambient temperature during said reaction, to yield crude DNTDFD.

2. (Currently Amended) The process of claim 1, wherein ~~the step of said~~ reacting tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF2/oleum further comprises stirring.

3. (Currently Amended) The process of claim 1, wherein ~~the~~ said diluent and said absorbent is a 2:1 mixture selected from one of FREON ® 11 with pentane ~~or~~ and FREON ® 11 with cyclopentane.

4. (Currently Amended) The process of claim 1, wherein ~~the~~ said diluent and said absorbent is a 2:1 mixture selected from one of pentane ~~or~~ and cyclopentane with FREON® 11.

5. (Currently Amended) The process of claim 1 wherein ~~the~~ said diluent and said absorbent is one of pentane ~~or~~ and cyclopentane.

PATENT

NC 84,049

6. (Currently Amended) The process of claim 1, further comprising ~~the additional step of~~ cooling the -1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione, the HNF2/oleum and the diluent and the absorbent, to a temperature between approximately -5 and 0 degrees C before allowing the temperature to rise.

7. (Currently Amended) The process of claim 1, wherein ~~the step of~~ said reacting tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF2/oleum, in the presence of a said diluent and said absorbent for the reagent difluoramine, comprises combining said HNF2/oleum and said diluent and said absorbent for a time of approximately one hour before adding the tetrahydro-1,5 bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H,6H) dione.

8. (Currently Amended) The process of claim 1, further comprising ~~the steps of~~ cooling said crude DNTDFD solution, adding it to crushed ice, filtering, adding a triturating solution, filtering and drying.

9. (Previously Presented) The process of claim 8, wherein the triturating solution is aqueous sodium hydrogen carbonate.

10. (Currently Amended) A process for synthesizing the compound 1,5-Dinosyl-3,3,7,7-tetrakis(difluoramino) octahydro-1,5-diazocine (DNTDFD), comprising ~~the following steps:~~
reacting tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF2/oleum initially approximately between -5 and 0 degrees C; and

10/719,856

3

PATENT

NC 84,049

allowing ~~the~~ a temperature to rise to between 10 degrees C and ambient temperature during said reaction to yield crude DNTDFD.

11. (Currently Amended) The process of claim 10, wherein ~~the step of said reacting~~ tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF2/oleum further comprises stirring.

12. (Currently Amended) The process of claim 11, further comprising ~~the step of adding~~ a diluent and an absorbent comprising at least one of pentane, FREON® 11, or and pentane and FREON® 11.

13. (Currently Amended) The process of claim ~~12~~ 11, further comprising adding a diluent and an absorbent comprising at least one of pentane, FREON® 11, and pentane and FREON® 11; and

cooling the tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF2/oleum to a temperature between approximately -5 and 0 degrees C, before allowing the temperature to rise.

14. (Currently Amended) A process for synthesizing the compound 1,5-Dinosyl-3,3,7,7-tetrakis(difluoramino) octahydro-1,5-diazocine (DNTDFD), comprising ~~the following steps:~~

reacting tetrahydro-1,5-Dinosyl-perhydrodiazocine-3,7-dione with HNF2/oleum, in the presence of a diluent and absorbent for the reagent difluoramine, initially approximately between -5 and 0 degrees C; and

10/719,856

4

PATENT

NC 84,049

allowing ~~the~~ a temperature to rise to between 10 degrees C and 15 degrees C during said reaction, to yield crude DNTDFD.

15. (Currently Amended) The process of claim 14, further comprising ~~the step of adding~~ a said diluent and said absorbent comprising at least one of pentane, FREON® 11, or and pentane and FREON® 11.

10/719,856

5